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Newsletter of the Western Pacific Regional Fishery Management Council

Ecosystem-based Management of Fisheries in the US Pacific Islands

The Council was established by Congress in 1976 to manage marine resources and maintain opportunities for sustainable domestic fishing in the US exclusive economic zone waters and high seas around Hawaii, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands and the eight US Pacific remote island areas.

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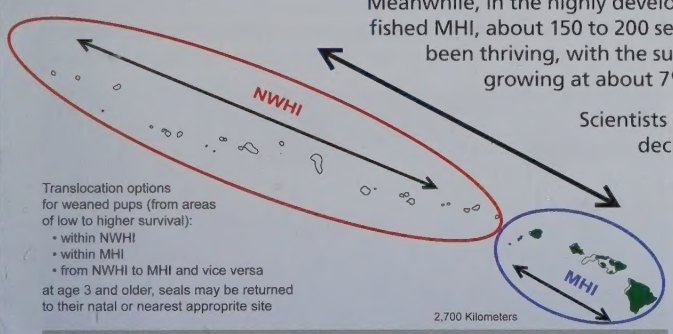
NMFS, Fishermen at Odds over Monk Seals

Proposed activities in the main Hawaiian Islands (MHI) to save the endangered Hawaiian monk seal population have raised the ire of local fishermen. Among the concerns are potential competition for fish, increased monk seal interactions with local fisheries and more fishing restrictions.

About 1,100 monk seals inhabit the Hawaii archipelago. The main subpopulation resides in the Northwestern Hawaiian Islands (NWHI)—an essentially uninhabited area designated as a marine national monument where virtually all fishing is prohibited. In this "fully protected area," monk seal numbers have continued to drop annually by 4.5%. Meanwhile, in the highly developed and fished MHI, about 150 to 200 seals have been thriving, with the subpopulation growing at about 7% per year.


NWHI
MHI
Translocation options for weaned pups (from areas of low to higher survival):
• within NWHI
• within MHI
• from NWHI to MHI and vice versa
at age 3 and older, seals may be returned to their natal or nearest approprite site
2,700 Kilometers

Source: NMFS

Scientists believe the declining NWHI numbers are due to poor survival of pups and juveniles (0-3 years old) likely caused by shark predation, food limitation and prey competition with ulua, sharks and other top predators. To curtail the NWHI decline, the National Marine Fisheries Service (NMFS) proposes to move up to 20 pups per year to the MHI and return them at 3 years of age.

The potential impacts of the proposal are analyzed in the Draft Hawaiian Monk Seal Recovery Actions Programmatic Environmental Impact Statement (PEIS). The Draft PEIS also analyzes actions that are already permitted and conducted, as well as other new and expanded actions, including vaccination studies, potential implementation of vaccines to prevent and mitigate infectious disease, and potential de-worming to improve seal health and survival, among others. Released Aug. 19, 2011, the Draft PEIS is open for public comment until Oct. 17, 2011.

Douglas Bell II, MD, photo

A 31-day-old monk seal pup born near Sandy Beach, Oahu, on Aug. 17, 2011, has been sighted daily on the beach with its mother.

One proposal in the Draft PEIS that has received less attention is the development of methods to minimize interactions between monk seals and people. Even if the proposed NWHI translocations do not occur, the monk seal population in the MHI is expected to grow, increasing the likelihood that seals will become habituated to people, interact with fishermen and other ocean users, or come into contact with fishing gear.

Separate from the PEIS, NMFS published a proposed rule on June 2, 2011, to revise the Hawaiian monk seal critical habitat. Under the Endangered Species Act (ESA), NMFS must identify the habitat features that are essential for the survival and recovery of "threatened" or "endangered" species under its jurisdiction. For monk seals, these are areas needed to pup, nurse, rest and feed.

Continued on page 2

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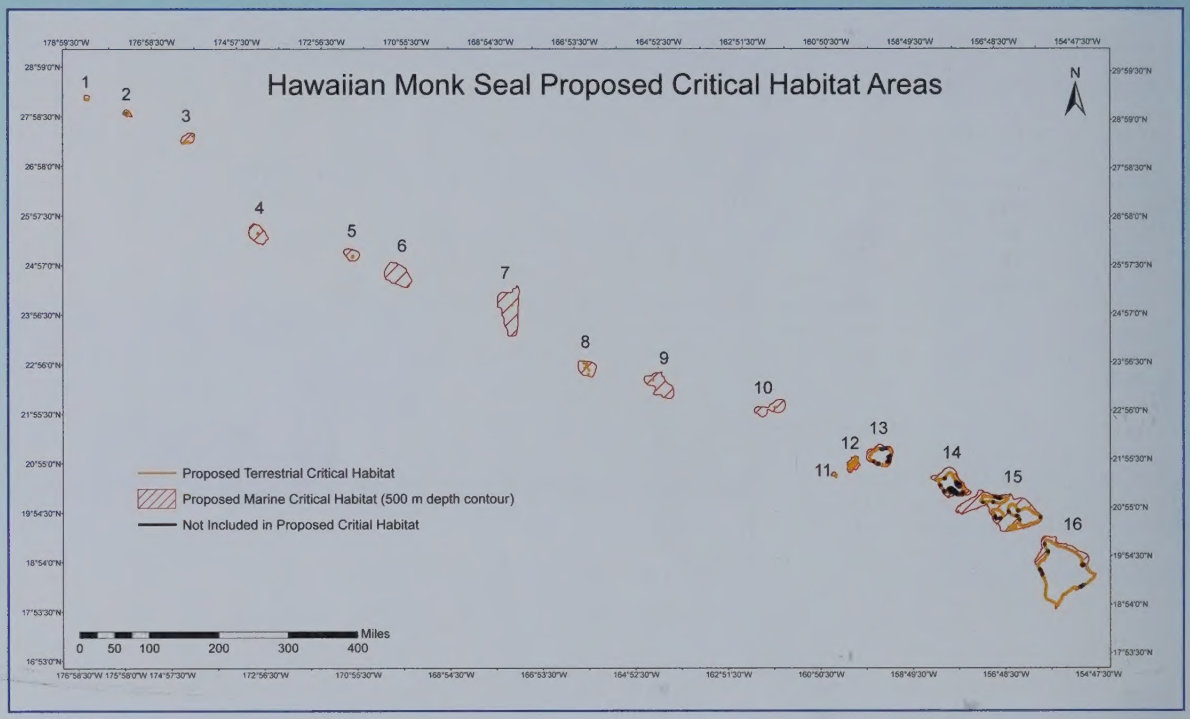
Monk seal hauled out on Kauai beach in the main Hawaiian Islands.

MONK SEALS *from page 1*



Source: NMFS

NMFS was required to undertake this review after being petitioned by three conservation groups in 2008.

The existing critical habitat, designated in 1986 and expanded in 1988, is limited to the NWHI, and encompasses all beach areas, sand pits and islets, lagoon waters, inner reef waters and ocean waters out to a depth of 20 fathoms. The proposed rule extends the current designation in the NWHI out to the 500-meter (273-fathom) depth contour and designates six new areas in the MHI. The MHI areas include terrestrial and marine habitat from 5 meters inland from the shoreline seaward to the 500-meter depth contour around the islands, except for certain military areas where exclusion will not result in extinction of the species.

Critical habitat designation adds a layer to an existing consultation process to ensure that activities that are federally funded, authorized or permitted do not destroy or severely modify the species' habitat. It does not create a protected area or restrict access, per se, or directly impact activities without the "federal nexus." Critical habitat also does not stop development or activities with the federal nexus.

Hawaii Rep. John Mizuno met with fishermen at the State Capitol on Aug. 31, 2011, to discuss concerns about proposed measures to recover endangered monk seals.

However, if NMFS determines that an activity will likely impact monk seal critical habitat, then it must work with the responsible agency and other entities to modify the activity or take precautions to protect the habitat. This has left many fishermen uneasy, as commercial fisheries managed under the Hawaii Archipelago Fishery Ecosystem Plan, such as the MHI bottomfish fishery, have the federal nexus. Even some non-commercial, recreational and subsistence fisheries have the federal nexus through the new National Saltwater Angler Registry. While available information suggests that fishing activities are not adversely modifying habitat in the MHI, it is uncertain what the future holds if critical habitat is implemented as proposed.

Measures Proposed to Reduce False Killer Whale Bycatch

On July 18, 2011, the National Marine Fisheries Service (NMFS) published the proposed False Killer Whale Take Reduction Plan. The plan includes both regulatory and non-regulatory measures to reduce the number of false killer whale mortalities and serious injuries (M&SI) to less than 2.5 whales, which is the current potential biological removal (PBR) level that triggered the Take Reduction Team (TRT) process. The proposed measures include recommendations from TRT meetings held in 2010, some of which were modified by NMFS. The TRT consists of more than 20 representatives of the longline fisheries, scientific and research organizations, conservation organizations, the State of Hawaii, the Marine Mammal Commission, the Western Pacific Regional Fishery Management Council and NMFS.

The proposed rule would eliminate the productive winter tuna fishing ground for the Hawaii longline fleet north of the main Hawaiian Islands (MHI). New closure zones to the south of the MHI and extending out to the seaward boundary of the US exclusive economic zone (EEZ; 200 miles offshore) may also be triggered the first year if two false killer whales are taken by the fishery ("take" includes hooking, snagging, etc. that may or may not involve mortality). In subsequent years, trigger of the southern closure would depend on the PBR (which can change) and the percent of observer coverage, which is currently 20 percent.

In addition, NMFS proposed to require the use of a "weak" (4.0 mm wire diameter) circle hook, which has a smaller diameter than a normal circle hook and would straighten when a false killer whale is accidentally hooked. Experiments conducted by NMFS and the Hawaii longline fishery showed no difference between the 4.5 mm and 4.0 mm wire diameter hooks in their ability to catch bigeye tuna.

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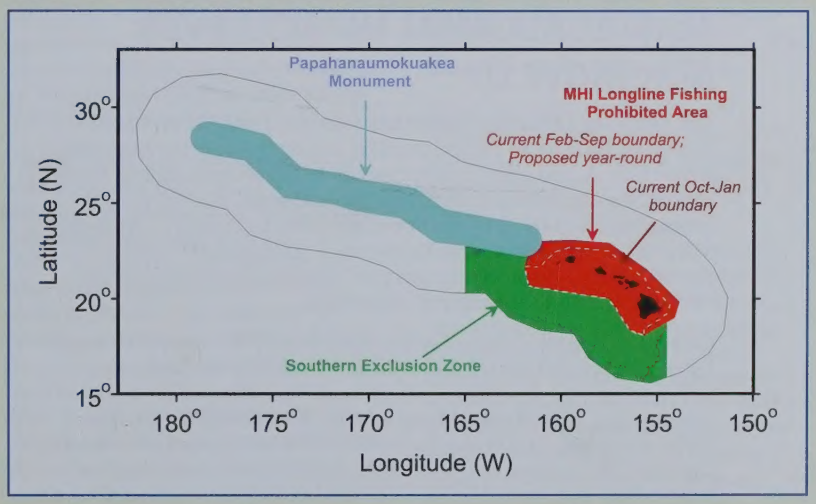


Proposed MHI Longline Fishing Prohibited Area and Southern Exclusion Zone, shown with boundaries of existing longline prohibited area and Papahanaumokuakea Marine National Monument. Source: NMFS PIRO "Draft Environmental Assessment, Regulatory Impact Review, and Initial Regulatory Flexibility Analysis for the Proposed False Killer Whale Take Reduction Plan", July 2011.

The study showed that the weak hook can retain bigeye tuna weighing up to 269 pounds; however, the study was conducted in a season when large bigeye tuna are typically not caught in the fishery. The study also showed that even the strong hook has the ability to straighten after an interaction with a false killer whale.

Proposed measures also include expanding the existing Protected Species Workshop to include new information on marine mammal interactions; requiring longline vessel captains to supervise the handling and release of hooked or entangled marine mammals; and requiring the posting of NMFS-approved placards on longline vessels.

The proposed rule is open for public comment until Oct. 17, 2011. To learn more, visit www.nmfs.noaa.gov/pr/about/archive.htm.

Pantropical spotted dolphin (Stenella attenuata)*: Howard Goldstein photo, NMFS SW Fisheries Science Center*

Hawaii Troll, Charter Fisheries' Marine Mammal Impact Level May Move Up

The National Marine Fisheries Service (NMFS) annually publishes the List of Fisheries (LOF) under the Marine Mammal Protection Act to classify commercial fisheries into one of three categories according to the level of incidental mortality and serious injury (M&SI) of marine mammals: Category I "frequent" M&SI of marine mammals; Category II "occasional" M&SI of marine mammals; and Category III "remote likelihood of" or "no known" M&SI of marine mammals.

Currently, Hawaii's deep-set longline fishery for tuna is the only fishery in the Western Pacific Region classified as Category I, which triggered the False Killer Whale Take Reduction Team process (see False Killer Whale article, this issue). Three other fisheries in the region are currently listed as Category II: Hawaii shallow-set longline for swordfish, American Samoa longline and Hawaii shortline.

This year, the proposed 2012 LOF, published on June 28, 2011, reclassifies Hawaii's troll and charter fisheries from Category III to Category II. The proposed classification is based on the technique of "fishing on" dolphins and anecdotal reports of hookings of pantropical spotted dolphins, although no actual data on interaction are available. Based on this limited information and the size of the two fisheries (2,305 vessels combined), NMFS projected that at least one incidental M&SI of the pantropical spotted dolphins occurs every year in each fishery.

Owners of vessels engaging in Category I or II fishery must obtain a marine mammal authorization by registering with the Marine Mammal Authorization Program and must accommodate an observer onboard upon request. The final 2012 LOF is expected to be published later this year. To view the proposed rule, go to www.nmfs.noaa.gov/pr/interactions/lof/.

North Pacific Loggerhead Turtle Listed as Endangered

The National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service published a final rule on Sept. 22, 2011, revising the listing of the loggerhead sea turtle under the Endangered Species Act (ESA). The Services published a proposed rule in March 2010 to change the listing from a single, globally threatened listing for all loggerheads to nine Distinct Population Segments (DPS) of loggerhead sea turtles listed as threatened or endangered under the ESA (see article in the Summer 2010 issue of *Pacific Islands Fishery News*). At the time, the Services proposed listing seven of the nine DPS as endangered and two as threatened. In the final rule, the Services determined five of the DPS to be endangered and four to be threatened.

Loggerhead turtle. Colin Limpus photo

The North Pacific Ocean DPS, the population interacting with the Hawaii shallow-set longline fishery, is listed as endangered. Also on the endangered list are the DPS for the Northeast Atlantic Ocean, Mediterranean Sea, North Indian Ocean and South Pacific Ocean. Remaining on the threatened list are the DPS for the Northwest Atlantic Ocean, South Atlantic, Southwest Indian Ocean and Southeast Indo-Pacific Ocean.

NMFS will have 135 days to produce a new Biological Opinion on the impact of the Hawaii shallow-set fishery on the North Pacific DPS and produce a new number of allowable interactions (i.e., incidental take statement) between the fishery and the North Pacific loggerheads.

The Western Pacific Regional Fishery Management Council will discuss this issue when it convenes Oct. 19-22, 2011, in Honolulu. The Council's Scientific and Statistical Committee will take up the issue Oct. 17-19.

Hawaii Shallow-Set Longline Lawsuit Saga Continues

In April 2011, the Hawaii Longline Association (HLA) appealed to the Ninth Circuit Court of Appeals (San Francisco) that the District Court (Honolulu) violated federal law when it approved the settlement between the National Marine Fisheries Service (NMFS) and environmental non-government organizations (ENGOs) regarding Amendment 18 to the Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region. The Ninth Circuit Court has yet to schedule a hearing date.

This ongoing litigation is the latest in a 12-year legal saga involving the Hawaii longline fishery and suits brought on by ENGOs. As reported in the Spring 2011 issue of *Pacific Islands Fishery News*, in this latest bout, the ENGOs sued the Secretary of Commerce and NMFS in December 2009 over their approval of Amendment 18. HLA was granted intervener status in the case.

Amendment 18 removed the set limit for the shallow-set fishery, which was established in 2004 at half of historical effort levels, as well as increased the fishery's loggerhead sea turtle annual interaction hard cap from 17 to 46. NMFS' approval of Amendment 18 and associated Biological Opinion (BiOp) was the culmination of a three-year process undertaken by the Western Pacific Regional Fishery Management Council that involved significant scientific and socio-economic analysis and multiple opportunities for public review. In its approval, NMFS found that the annual interaction hard cap of 46 loggerhead turtles would result in the maximum mortality of 2.51 adult female loggerheads, which is so low relative to the population size, that its effect on the population cannot be distinguished from the effects of natural mortality. In other words, NMFS concluded that the maximum annual mortality to loggerhead populations from the implementation of Amendment 18 is not statistically different than zero.

Actual interactions in swordfish fishery since reopening in 2004

Species	2004	2005	2006	2007	2008	2009	2010	2011
Loggerhead	1	12	17	15	0	3	7	12
Leatherback	1	8	5	5	2	9	8	11
Olive Ridley	0	0	1	1	2	0	0	0
Green	0	0	0	0	1	1	0	4

As of Sept. 1, 2011

NMFS' initial response to the lawsuit was to ask the District Court to dismiss the case because the plaintiffs' arguments were without merit and failed to identify new information that would require NMFS to reconsider approval of Amendment 18. Several months later, NMFS and the ENGOs asked the District Court to approve a stipulated settlement that 1) ordered NMFS to vacate and remand the portions of the 2008 BiOp that supported the increased annual loggerhead interaction hard cap; 2) ordered NMFS to vacate and remand portions of Amendment 18's implementing regulations that provide for the increase in the annual loggerhead interaction hard cap; 3) ordered NMFS to reinstate the annual loggerhead annual interaction hard cap to 17; 4) ordered NMFS to prepare a new BiOp no later than 135 days from NMFS' final determination of the Endangered Species Act (ESA) listing status of loggerhead turtles; and 5) ordered NMFS to not increase the hard caps without preparing a new BiOp and associated regulations.

To say the least, the Council was shocked and disappointed that NMFS settled with the ENGOs a few months after stating their case was without merit.

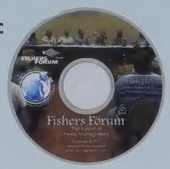
The Hawaii longline fishery is believed to be the most closely monitored longline fishery in the world. It has received a score of 94 percent when evaluated against the FAO Code of Conduct for Responsible Fisheries—no other longline fishery in the Pacific is believed to be able to boast similar scores. Further, the Hawaii longline fishery is recognized globally as a model in terms of data collection and monitoring, stringent protected species mitigation measures and spatial management.

Sea Turtle Bycatch Video Now Online

The development of effective management frameworks to reduce fisheries bycatch has been a primary thrust of sea turtle conservationists worldwide. Still elusive, however, is the mechanism by which the primary stakeholders can reach a common, trusting dialogue in their mutual efforts to promote responsible fisheries.

On April 12, 2011, eight panelists of various backgrounds, expertise and perspectives gathered at the 31st Annual Symposium on Sea Turtle Biology and Conservation in San Diego, Calif., to address this issue. A video of this special session, "Finding Common Ground in Fisheries Management," is now available for viewing in two segments at http://vimeo.com/wprfmc. For more information, email asuka.ishizaki@noaa.gov.

Fishers Forum: The Future of Honu Management



The first open public discussion on the future management of honu (Hawaiian green sea turtle) took place June 16, 2011, in Honolulu. Hosted by the Western Pacific Regional Fishery Management Council as part of its 151st Council meeting, the forum included introductory remarks by Micah McCarty of the Makah tribe, which co-manages and has tribal rights to gray whales; a panel of six scientific and regulatory experts and Hawaii community members; and a public discussion period. The panel was moderated by Stewart Allen of the National Marine Fisheries Service (NMFS) Pacific Islands Fisheries Science Center. Videos of the forum can be viewed online at http://vimeo.com/wprfmc.

Panelists Thierry Work, U.S. Geological Survey; Lance Smith, NMFS Pacific Islands Regional Office; and Earl Miyamoto, Hawaii Department of Land and Natural Resources (DLNR) reviewed the science, threats and regulatory mechanisms regarding honu.

Native Hawaiians have harvested turtles for millennia. In the 1940s, commercial exploitation began. By the 1970s, the survival of a dwindled population depended on 150 nesting females in the Northwestern Hawaiian Islands. Since the species was listed as threatened under the Endangered Species Act (ESA) in 1978, the population has increased steadily at a rate of 5.7% annually and previously known threats, such as the tumor-forming disease fibropapilloma, are on the decline. Today, the honu is seen as a remarkable species recovery success story. In fact, some main Hawaiian Islands (MHI) foraging areas (e.g., Kaloko-Honokōhau National Historical Park) are approaching or have reached carrying capacity.

The ESA aims to protect and recover imperiled species and the ecosystems upon which they depend. When a listed species reaches a level where long-term survival in the wild is ensured, it may be removed from the list ("delisted"). The process takes years to complete. Three main criteria must be met first: 1) the population must be recovered, stable and/or increasing; 2) threats to the population must be under control; and 3) a management plan must be in place to maintain the population after it is delisted.

The Hawaii DLNR has been preparing a Habitat Conservation Plan (HCP) for honu to address the incidental take of green turtles in near-shore fisheries. The HCP could be adopted as the honu management plan in the future if the species is delisted. The plan is envisioned to have placeholders to address directed take such as cultural harvest.

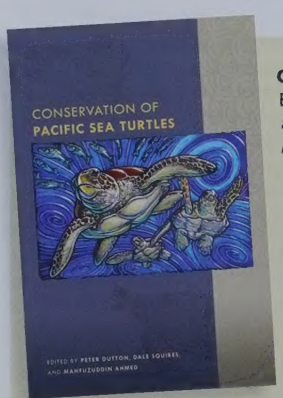
Panelist Danny Akaka Jr. of Mauna Lani Resort on the Big Island spoke about the honu from the tourism perspective. The resort has a sea turtle captive rearing and release program, and Akaka views turtles as a significant ambassador of Hawaii.

Panelist Frank Farm, a fisherman, said many fishermen believe the near-shore ecosystem is out of balance due to the successful restoration of the honu. If the carrying capacity of the ecosystem has been reached, then one solution to restore the ecosystem balance, Farm suggested, is to cull permitted numbers, determined by the scientists, in a systematic, controlled manner. In this process, Farm recommended, the responsible agency should involve all stakeholders and interested members of the public to develop the management plan. While fishermen may not have all of the solutions, they can offer many ideas. They also would agree on one thing, according to Farm, "no commercial harvest."

Mac Poepoe of Hui Malama O Mo'omomi, Molokai, said rules will be important if harvesting is to be allowed and people will need to be familiar with the kapu concept, such as implementing no-take zones. He said limits should be set on the maximum and minimum sizes of turtles allowed to be harvested and bans should be placed on harvesting females that are laying eggs, commercial harvesting and night diving to harvest. Permits, bag limits, seasons and other factors would be up for discussion.

The panelists and audience yielded much thought and insight to the future of honu management and provided a reminder that any allowable harvest in the future would come with a suite of responsibilities.

For more information on this issue, contact the Council's protected species coordinator, Asuka Ishizaki, at asuka.ishizaki@noaa.gov.



Conservation of Pacific Sea Turtles
Edited by Peter Dutton, Dale Squires, and Mahfuzuddin Ahmed
Foreword by US Senator Daniel K. Inouye
University of Hawaii Press, July 2011
(hardback; 496 pages)
ISBN 978-0-8248-3407-4

Across the Pacific, populations of some species of sea turtles face extinction unless recent dramatic declines are reversed. The continuing decline of leatherbacks and loggerheads in particular illustrates the limitations of the current gradual and unilateral approach to conservation. Recovery requires instead a holistic solution that addresses all sources of mortality throughout the entire life history and habitat use of these transnational populations.

Conservation of Pacific Sea Turtles presents the outcome of the Bellagio Conference on Sea Turtles in 2004 and is a follow-up publication to the *Bellagio Blueprint for Action on Pacific Sea Turtles*. The ideas and case studies come from conservation biologists, economists, marine life policy experts, fishing industry and fisheries professionals, management specialists, and development assistance researchers. It provides a new synthesis and blueprint for action that shifts the paradigm from piecemeal and unilateral conservation to a more holistic and multilateral approach to the recovery of Pacific sea turtle populations.

WCPO Tuna Catches Up, Stricter Measures Advised

2010 saw the second highest record of tuna catches in the Western and Central Pacific Ocean (WCPO), according to a provisional report by the Secretariat of the Pacific Community's Oceanic Fisheries Programme (SPC-OFP). The total tuna landings in the WCPO amounted to 2,414,994 mt, with purse seine accounting for 1,820,844 mt (3rd highest on record) and longlines pulling in 239,853 mt.

Species caught included 1,706,166 mt of skipjack (second highest on record); 470,161 mt of yellowfin (second highest on record); 108,997 mt of bigeye (lowest on record since 1996); and 129,670 mt of albacore (second highest on record). Catch of South Pacific albacore was 88,919 mt (highest on record), which is likely due to the longline fleet changing its target species.

Though catches were lower in 2010 from the record high in 2009, average prices for fish increased. In 2010, the estimated values included $2.48 billion (2nd highest) for the purse seine fleet and $1.487 billion for the longline fleet.

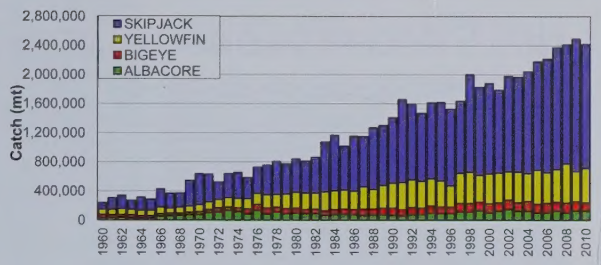
Also on the increase was the number of purse seine and longline vessels of both Pacific Island nations (PINs) and distant water fishing nations (DWFNs, i.e., metropolitan countries along the Pacific Rim). Purse seiners reached a record high of 280 in the WCPO.

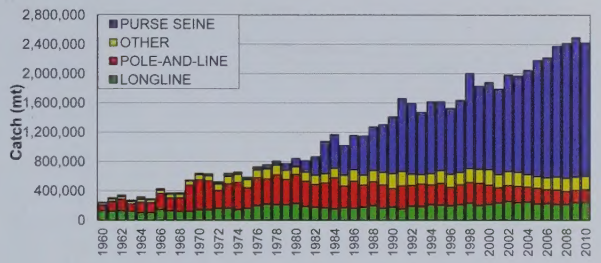
The SPC-OFP presented this report to the 7th Science Committee (SC7) of the Western and Central Pacific Fisheries Commission (WCPFC), which met Aug. 9 to 17, 2011, in Pohnpei, Federated States of Micronesia.

SC7 also reviewed five stock assessments, all of which resembled previous assessments. Bigeye is experiencing overfishing and may possibly be in an overfished state. Yellowfin, skipjack and North and South Pacific albacore are not experiencing overfishing nor are they in an overfished state.

For bigeye, SC7 recommended that the WCPFC reduce the fishing mortality by 32% from average levels for 2006-2009, which would return the fishing mortality rate to F_{msy}. This is equivalent to a 39% reduction in fishing mortality from 2004 levels and a 28% reduction from average 2001-2004 levels.

To address differing levels of exploitation and fishing mortality among the different regions used in the stock assessments, SC7 suggested a spatial management approach be considered. For yellowfin, SC7 noted high exploitation in the western equatorial Pacific and recommended no increase in fishing mortality in that region.



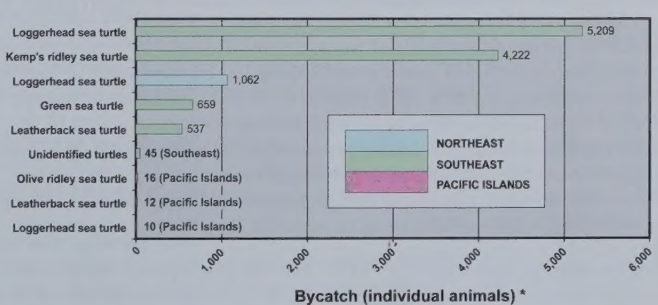


SC7 reached consensus on future stock assessments. They recommended skipjack, yellowfin and bigeye should be assessed in 2013 or 2014. In 2012, the Science Committee agreed to conduct assessments on South Pacific albacore and southwest Pacific striped marlin. In addition, assessments for the silky and oceanic whitetip sharks will be conducted as scheduled in the shark research plan. SPC-OFP presentations showed that of the eight key shark species evaluated, the oceanic whitetip seems to be in the worst shape with marked declines seen in all data sets examined (including Hawaii longline observer data). Declines also appear in blue and silky sharks, but the trends are less apparent.

The SC7 recommendations will be considered by the WCPFC at its 8th regular meeting, Dec. 5-9, 2011, in Koror, Palau.

First National Bycatch Report Released

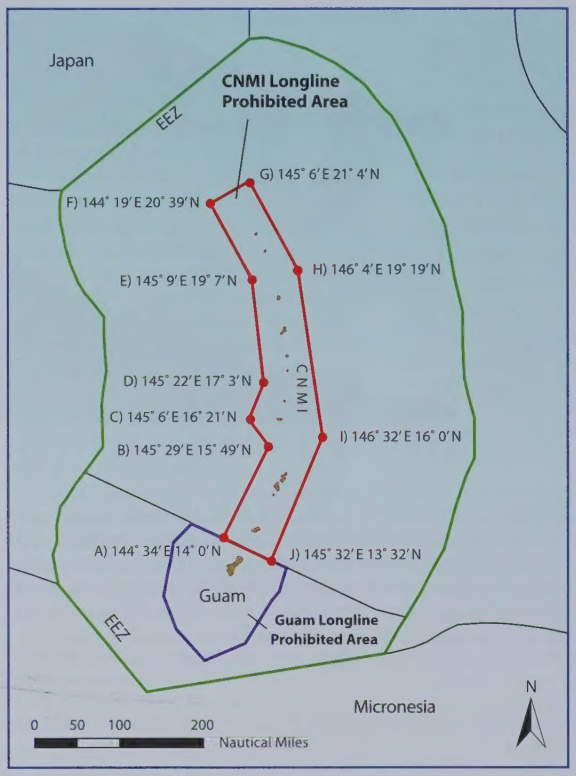
NOAA released a National Bycatch Report on Sept. 22, 2011. The report of data collected in 2005 will help the agency better monitor progress in reducing unintended capture of non-target fish, marine mammals, sea turtles and seabirds.



While the report does not represent an estimate of current bycatch rates, it is the first to compile regional data about US commercial fisheries into one nationwide report. It found that 17 percent of fish caught commercially was harvested unintentionally. The report also details the numbers of marine mammals, sea turtles and seabirds caught incidentally during fishing operations in 2005. It is available at www.nmfs.noaa.gov/by_catch/bycatch_nationalreport.htm.

** Bycatch estimates include mortality and live releases. For some rare-event species, data from a range of years were used. Estimates from the Southeast and Gulf of Mexico shrimp trawl fisheries are from a 2002 biological opinion. Since 2002, effort and associated bycatch in these fisheries have decreased substantially. Not shown is the bycatch of one olive ridley sea turtle in the SW Region. Source: National Bycatch Report*

NMFS Accepts Longline, Rejects Purse Seine Spatial Measures


Japan
CNMI Longline Prohibited Area
EEZ
G) 145° 6′ E 21° 4′ N
F) 144° 19′ E 20° 39′ N
H) 146° 4′ E 19° 19′ N
E) 145° 9′ E 19° 7′ N
D) 145° 22′ E 17° 3′ N
C) 145° 6′ E 16° 21′ N
I) 146° 32′ E 16° 0′ N
B) 145° 29′ E 15° 49′ N
CNMI
A) 144° 34′ E 14° 0′ N
J) 145° 32′ E 13° 32′ N
Guam
Guam Longline Prohibited Area
EEZ
Micronesia
N
0 50 100 200
Nautical Miles

Amendments to spatially manage longline and purse seine fisheries within the US exclusive economic zone (EEZ) around the Mariana and American Samoa Archipelagos received mixed fortunes in 2011.

The Western Pacific Regional Fishery Management Council took final action in March 2008 to establish a 30-nm longline prohibited area around the Commonwealth of the Northern Mariana Islands (CNMI) and to prohibit purse seine fishing throughout the exclusive economic zone (EEZ) waters around CNMI and Guam (Mariana Archipelago). At the same meeting, the Council recommended prohibiting purse seine fishing within 75 nm of the American Samoa Archipelago to reduce potential for localized stock depletion and increased catch competition with local small boat fisheries.

The National Marine Fisheries Service (NMFS) Pacific Islands Regional Administrator approved the CNMI longline exclusion zone, which will help protect the troll fishery that operates out of Saipan. The CNMI longline exclusion zone was developed by the Council in consultation with local troll fishermen and the longliners. It is similar to one around Guam; however, the Guam prohibited area extends further seaward, i.e., 50 nm offshore to the east and west and 100 nm offshore to the south.

The proposed Mariana Archipelago purse seine closed area did not fare as well. NMFS disapproved the amendment, leaving these waters open to US purse seiners, which may compete for fish with the local small boat troll fisheries in Guam and CNMI and a fledgling longline fishery based in Saipan.

Also disapproved by NMFS was the Council's amendment to implement a 75-nm purse seine area closure around American Samoa. However, small vessel troll fisheries in American Samoa will continue to be protected by the exclusion zone implemented by the Council in 2002 that bans pelagic fishing vessels greater than 50 feet in length, including purse seiners and longliners, from operating within 50 nm of the archipelago.

NMFS said its reason for disapproving the purse seine area closures was that the proposed measures were not based on best available scientific information and were, therefore, inconsistent with National Standard 2 of the Magnuson-Stevens Fishery Conservation and Management Act. NMFS noted that no active purse seine fishery exists in the US EEZ around the Mariana Archipelago (although the world's largest purse seine fishery operates directly south of Guam in the neighboring EEZ waters of the Federated States of Micronesia) and, therefore, no data is available on the impact of the purse seine fishery on the small boat fleet.

NMFS stated that the evidence of the impacts of the purse seine in waters around American Samoa is inconclusive as the longliners catch more skipjack and yellowfin tuna in the EEZ than the purse seiners. However, as noted above, the large pelagic vessel area closure provides a 50-nm buffer zone between purse seiners and larger longline vessels (>50 feet in length) and the small (<50 feet) pelagic trollers and longliners. Moreover, fishermen in American Samoa are aware that the large longline vessels operating in the EEZ (which are locally owned and operated) catch substantial volumes of skipjack and yellowfin tuna, but they were concerned about additional catches of these species by purse seine vessels (which are generally not locally owned/operated) and their potential impact on small trollers and longliners. As such, based on fishermen's comments, the Council had proposed the 75-nm purse seine closure around American Samoa as an additional buffer zone.

Workshop Prepares Island Communities for CMSP

Historically, the ocean has been primarily used for fisheries, transportation and recreation. Today, however, sewage, research, tourism, protected areas, military training, aquaculture, wind and wave energy, and ocean thermal energy conversion are competing for increasingly limited coastal and marine space.

CMSP
Coastal & Marine Spatial Planning
U.S. Pacific Islands

Coastal and marine spatial planning (CMSP) is an approach to address the conflicts among the various existing and

Left: CMSP community training workshop group photo.

Below: Participants share their mock CMSP plans with each other on the final day of the workshop.

futures uses of the coastal and marine environment. CMSP is also one of the nine strategic actions in the National Ocean Policy, established by President Obama by executive order on July 19, 2010. The national CMSP framework calls for the creation of a Pacific Islands Regional Planning Body to implement CMSP in Hawaii, Guam, the Commonwealth of the Northern Mariana Islands (CNMI) and American Samoa.

To prepare communities for CMSP, the Western Pacific Regional Fishery Management Council presented a training workshop to 125 fishing, indigenous and community members from throughout the US Pacific Islands. Held July 31 to Aug. 4, 2011, in Honolulu, the workshop was conducted by Anne Walton of the NOAA National Marine Sanctuaries Program's International Program and included invited guests of the State of Hawaii's Department of Land and Natural Resources, the Hawaiian Islands Humpback Whale National Marine Sanctuary and the American Samoa Department of Commerce.

The workshop walked participants through the CMSP process. Working in teams of six, they developed mock plans for selected areas based on a mixture of real and made up information.

Following this four-day training, the Council presented a one-day workshop to about 40 fishermen that focused on effective participation in CMSP. The workshop was conducted by CONCUR, Inc., a company that has been involved in CMSP with fishing and indigenous communities in California and the East Coast. The trainers shared their experiences and engaged the fishermen in activities on negotiation and ways to organize and mobilize data and information. The study area for the training was the offshore site of Penguin Bank, a prized fishing ground for fishermen from Oahu, Molokai, Maui and Lanai.

For more on the National Ocean Policy and CMSP framework, please visit www.whitehouse.gov/administration/eop/oceans/cmsp. For more on the workshops, contact the Council at (808) 522-8220 or email info.wpcouncil@noaa.gov.

Honolulu Domestic Fishery Value Up in 2010

US commercial fishermen landed 8.2 billion pounds of seafood in 2010, valued at $4.5 billion, an increase of 200 million pounds and more than $600 million in value over 2009, according to *Fisheries of the United States 2010*, released by NOAA in September 2011.

Honolulu ranked as the nation's 8th port in fisheries value, with $71.6 million in landings, up from $59.4 million the previous year. While Honolulu does not rank in the top 10 in the amount of fish landed, it consistently ranks in the top 10 US ports for fishery value because pound for pound they are worth more than fish landed in most US port. Hawaii's fisheries are ice boat fisheries, landing market- and table-ready, sashimi-quality, fresh (not frozen) fish.

Also according to the NOAA report, in 2010 more than 71 million marine recreational fishing trips were made by 10 million anglers in the continental US, Alaska, Hawaii and Puerto Rico. The estimated total marine recreational catch was more than 357 million fish, but 60 percent of the catch was released alive.

In Hawaii, according to NOAA, nearly 475,000 marine recreational participants took nearly 2.4 million trips and caught a total of 5.2 million fish. The most commonly caught non-bait species (in numbers of fish) were yellowfin tuna, skipjack tuna, convict tang, Hawaiian flagtail and bluefin trevally. By weight, the largest harvests were yellowfin tuna, dolphinfish (mahimahi), skipjack tuna, wahoo (ono), pink snapper and blue marlin.

The report also shows that the average American ate 15.8 pounds of fish and shellfish in 2010, a slight decline from the 2009 figure of 16 pounds. The United States continues to be third-ranked for consuming fish and shellfish, behind China and Japan. Americans consumed 4.878 billion pounds of seafood, slightly less than the 4.907 billion pounds in 2009.

Besides increased fish landings and revenues, the US continued to import the vast majority of its seafood—86 percent of domestic consumption. China was the leading exporter of seafood to the US. With imports valued at $14.8 billion, and exports of $4.4 billion, the US trade deficit in seafood was $10.4 billion, an increase of just over $1 billion.

MHI Bottomfish Season Starts with New Rules

Hawaii Division of Aquatic Resources staff at a Hawaii bottomfish workshop: (seated l-r) Reggie Kokkubun works with a fisherman on the new bottomfish report form, Jessica Phelps explains the new BF registration and Jo-Ann Kushima passes out copies of the regulatory handbook.

The main Hawaiian Island (MHI) bottomfish fishery re-opened Sept. 1, 2011, under a quota of 325,000 pounds of seven deepwater species (known as the Deep-7), up from the previous year's quota of 254,000 pounds. In this new season, fishermen were alerted to new rules aimed at improving the stock assessment and the process through which the quota is managed. A series of workshops were held throughout Hawaii in August to give fishermen a head start on the new changes. Here is quick summary of those changes. For more details, go to www.hawaiibottomfish.info.

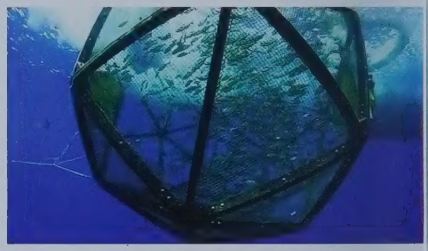
New Annual "BF" Vessel Registration – All vessels to be used for bottomfishing in the next season must register under the new BF registration program with Hawaii Division of Aquatic Resources (HDAR). The annual BF renewal requirement will transform the BF database from a simple archive of all vessels that could or may have participated in the bottomfish fishery into a useful resource for fishery managers to monitor how many vessels intend to be used for bottomfishing each year. More importantly, it will indicate which of those vessels may be used for commercial and non-commercial purposes. Better assessment and incorporation of the catch contribution of non-commercial or recreational bottomfish fishing remains a priority for improving the bottomfish stock assessment.

New Commercial Bottomfish Trip Reporting Requirement – To improve the accuracy of forecasting the annual fishery closure, reporting of commercial catch will be required on a per-trip basis. Fishermen must complete and transmit their reports to HDAR within five days of the trip completion, instead of on the 10th of each month. In setting quotas, managers take a number of adjustments into consideration. One of the adjustments addresses the ability to project catch accumulation and accurately forecast the closure date. Last year, the quota limit was set 254,000 pounds of Deep-7. When all was tallied on July 12, 2011, the total landings (including delinquent reports) went up to 270,880 pounds, which exceeded the quota by 6.6%. The average overage for all the years that the MHI bottomfish has been managed under a quota is 1%. This includes a significant underage in the 2009-2010 fishing year due to processing errors resulting from implementation of the new electronic reporting system. Removing that year, the annual average overage is about 8%.

New Quota System – Annual Deep-7 bottomfish quotas for the MHI started in 2007 to address concerns about the stock. A total allowable catch (TAC) was set each year by the Western Pacific Regional Fishery Management Council based on the best available scientific information provided by the National Marine Fisheries Service (NMFS) and the Council's Scientific and Statistical Committee (SSC). In 2006, Congress changed the Magnuson-Stevens Fishery Conservation and Management Act to require all federally managed species to be managed under a quota program by 2012 and referred to the system as an annual catch limit (ACL). This is the first year Hawaii bottomfish will be managed under the ACL program. It is also the first quota that is based on a peer reviewed NMFS stock assessment. In prior years, NMFS produced stock assessments that the Council's SSC did not support for bottomfish management. In lieu of the NMFS assessment, the SSC used a conservative method (25th percentile of the 25-year running catch average) to establish the TAC levels.

First Special Coral Reef Ecosystem Permit Issued under Hawaii FEP

In August 2011, the National Marine Fisheries Service Pacific Islands Regional Office (NMFS PIRO) transferred a one-year Special Coral Reef Ecosystem Fishing Permit from Kona Blue to Kampachi Farms in accordance with the Western Pacific Regional Fishery Management Council's Hawaii Archipelago Fishery Ecosystem Plan (FEP). This permit, originally issued in July, authorizes the culture and harvest of Kona Kampachi *(Seriola rivioliana)*, which is a managed coral reef ecosystem species under the Hawaii FEP. With the permit, Kampachi Farms is

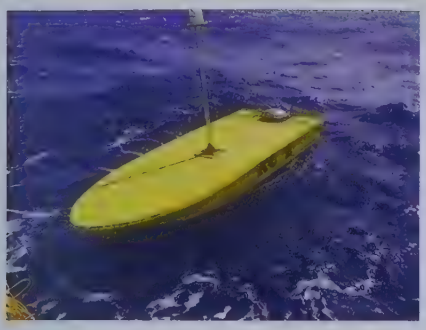


A Kampachi Farms Aquapod. Bryce Groark photo

undertaking the Velella Mariculture Research Project to test the feasibility of raising marine fish using two small, untethered, drifting Aquapods deployed in the US exclusive economic zone (EEZ) waters off the Kona coast of Hawaii Island. Under the Magnuson-Stevens Fishery Conservation and Management Act, aquaculture is defined as a form of fishing.

The Aquapods maintain a controlled drift in an area from 3 to 150 nm off the coast in waters between 10,000 and 12,000 feet deep. They currently hold about 2,000 pieces of Kona Kampachi in offshore waters southwest of Honokohau Harbor. After the nine-month grow-out period, Kampachi Farms hopes to prove its concept with successful marketing of the fish.

For more information on the Velella Project, go to www.youtube.com/watch?v=OPs-0LfCEq0 or contact NMFS PIRO.



Community FADs Deployed

Properly maintained fish aggregation devices (FADs) located near communities can reduce the time and fuel community members need to catch fish. Such community FADs can also help fishery managers when the fishermen agree to voluntary reporting of their catches.

With these win-win outcomes in mind, the Western Pacific Regional Fishery Management Council partnered with members of the fishing communities in Hana and Kahului, Maui, and Milolii, Ka'u and Naalehu on the Big Island, to deploy four FADs for the benefit of their communities.

While anyone may fish the these community FADs, they are asked to please use best practices by not tying up to or wrapping lines around the FADs.

Fishermen operating at or near the community FADs are also urged to submit a completed voluntary catch report to the Council. This information will provide the Council with an understanding of the number of fish caught, size of fish and fishing effort associated with the FADs.

If the community FAD program is successful, the Council will work with other communities throughout the Western Pacific Region on similar FAD projects. For more information, visit www.wpcouncil.org/FAD.html.

Hawaii Governor Vetoes Aha Moku Bill

On July 12, 2011, Gov. Neil Abercrombie vetoed Senate Bill 23, effectively ending five years of legislative and community efforts to revitalize the Aha Moku traditional management system for natural resources in the State of Hawaii. SB 23 sought to create the Aha Ki'ole Advisory Council in the Department of Land and Natural Resources. The effort was initiated by participants of the 2006 Ho'ohanohano I Na Kupuna Puwalu (Honor Our Ancestors conference) and resulted in the creation of the Aha Ki'ole Advisory Committee by the Hawaii Legislature and Gov. Linda Lingle in 2007. The Aha Ki'ole was tasked to research and make recommendations regarding the re-establishment of the Aha Moku system. The Aha Ki'ole reported their findings to the Legislature in 2008, 2009, 2010 and 2011. The reports chronicled a steady increase in understanding of and support for implementing traditional management practices in our current management regime.

WHAT WORKED BEST FOR HAWAI'I IN THE PAST STILL WORKS BEST FOR HAWAI'I TODAY.
Revive the sustainable resource management practices that use the generational knowlege and wisdom of our island traditions.
Contact your island's Aha Moku representative:
Aha Moku
Vanda Hanakahi (Moloka'i)
Pilani Kaawaloa (Hawai'i)
Ka'eumoku Kapu (Maui)
kuleanavalley@yahoo.com
Winnie Basques (Lana'i)
Winnie@aloha.net
Les Kuloloio (Kaho'olawe)
Kuloio@clearwire.net
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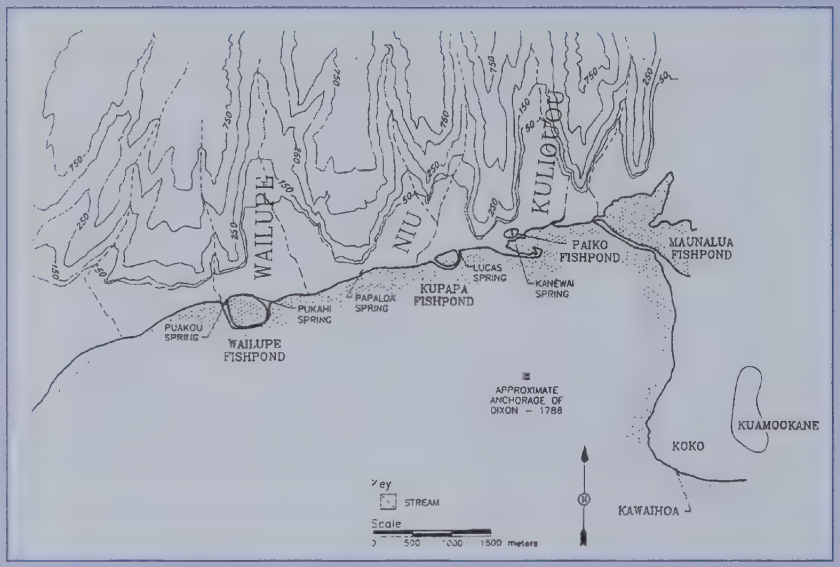
Sharon Pomroy (Kaua'i)
Pomroys001@hawaii.rr.com
Keith Robinson (Ni'ihau)
niihauisland@hawaiian.net
To learn more, visit the Aha Moku website at www.ahamoku.org

The Aha Moku renaissance continued with strong support from the participants of the Ho'o Lei 'Ia Pae'Aina Puwalu (Throw the Net, Bring Everyone Together conference series) in November 2010, which culminated in the gathering of nearly 200 traditional practitioners, fishermen and conservationists in Honolulu. SB 23 sailed through the Legislature with nearly unanimous approval (three excused from the final reading).

The governor vetoed SB 23 for three reasons. First, as currently proposed, the Council lacked government oversight. Second, "the intent in creating the Council is similar to the purpose for which the Office of Hawaiian Affairs (OHA) was created and is a natural evolution of what a new Native Hawaiian government entity would seek to accomplish." The governor suggested that, "if there is a determination to not wait until this entity is formed, then the council should at least be placed within OHA." Third, the bill only provides funding for an executive director and assumes that all other costs would be absorbed the Department of Land and Natural Resources. The governor said he supported the intent of the legislation and welcomed the chance to review a bill that addresses his concerns.

The Aha Ki'ole Advisory Committee, established under the Lingle Administration, officially ended on June 30, 2011. However, its current members are continuing efforts to establish the Aha Moku system of natural resource management, meet with communities and practitioners, document traditional management practices and support efforts by communities to manage their resources in a traditional way. The Council supports the Aha Moku system, as it aligns with the objectives of the Hawaii Archipelago Fishery Ecosystem Plan by providing a community and cultural consultation process and by recognizing traditional ecological knowledge and indigenous fishing rights.

For more on this initiative, go to www.ahamoku.org or contact the Aha Moku advisor for your mokupuni (island).



Known production resources along Oahu's southeastern coast. Source: U.S. Geological Survey. 1928 Koko Head Quadrangle. U.S. Government Printing Office, Washington.

Hawaii Community Seeds Efforts to Restore Fishpond, Fishery Ecosystem

In 2008, the Kuli'ou'ou–Kalani Iki community on the island of Oahu began an initiative to restore the flow of spring water to the fishpond at Kalauah'iha'i. Their efforts are paying off. The Hawaii State Legislature in 2011 passed House Concurrent Resolution 104 to address the one million gallons of fresh water that are diverted daily into utility line trenches and the sewer rather than allowed to flow its traditional course to the fishpond and then into the sea at Maunalua Bay. The diversion has been going on for nearly two decades to the detriment of the marine ecosystem.

Kalauha'iha'i, known in contemporary times as Lucas Spring, was once the summer home of Kamehameha Nui and Ka'ahumanu. Its fishpond was fed by an underground artesian source via a lava tube. In 1989 the State Water Commission registered Kalauha'iha'i as a fishpond that was home to aholehole (Hawaiian flagtail), 'opae lolo (aloha prawn),'ama'ama (mullet), awa (milkfish), hapawai (brackwish water snail) and koi.

In the early 1990s, a contractor working on the widening of the highway from Honolulu to Hawaii Kai blocked the water from the spring. The then owner of Kalauha'iha'i wanted the source restored. In 1993, to avoid increased costs to the highway widening project, the State of Hawaii condemned and purchased the home and the pond, despite the owner's protest.

The water diversion not only killed the fish in the pond, it increased the salinity and temperature of Maunalua Bay, disrupting the ecosystem and promoting the growth of alien algae.

HCR 104 resolves that the Department of Transportation, in consultation with the Board of Land and Natural Resources, support a study that would return the traditional water flow to Kalauha'iha'i fishpond and Maunalua Bay.

The restoration and revival of historical springs and ancient Hawaiian fishponds can have profound benefits for Native Hawaiians, the State of Hawaii, Hawai'i communities and the environment. Fishponds are a visual symbol of the richness of Hawaii's past, melding nature's abundance and the skill and ingenuity of our Hawaiian predecessors.

William Wedemeyer Chronicles: Uhu Fishing

A few years ago, the Western Pacific Regional Fishery Management Council was given the original handwritten notes from a series of interviews with William Wedemeyer of Hilo, which provides an historical account of fishing on the island of Hawaii (Big Island). The interview opens, *"To please my friend Mrs. Stephens I will relate these lines about old time fishing between Pepeekeo on the Hamakua side of this island (Hawaii) & the cape of Kumukahi [East Cape] on the Puna side, something which could be interesting to Fish and Game warden, the old & new generations of Hawaiians & the General public of this Island & all the islands. As I am the only man alive today who knows the names of the spots, Hawaiians called them spots (Koa) & which were known to all old Waiakea fishermen their fathers, grand fathers, great grandfathers & generations before them."*

Wedemeyer was born in Germany in 1881 and died in Hawaii in 1955. On Nov. 28, 1952, at the age of 71, Wedemyer noted that he had worked for Matson Hawaii Company for about 40 years, owned a skiff that received some damage during high seas during that month but continued to fish as past-time.

He also said, *"As I have learned & fished together on Canoe outrigger & boats with such crack fisherman as Pahea, Nakahaina, Kaliano, Nanuahoe, Pali, Kahaku, Pakele, Noelanie, Namana Kaama, who happened to be my father-in-law, Kalapu Kapeppa and some more."*

"Sometimes Mr. Uhu is smart, he goes all around the net but won't go in."

As such, it appears he was married to a daughter of Namana Kaama.

The historical account, recorded with a good smattering of pidgin and local place names, describes in great detail the practices and strategies used in near- and offshore fisheries at that time. To share these stories, the Council will include an excerpt on one of the fisheries from Wedemeyer's account in each issue of *Pacific Islands Fishery News*. To the extent practical, edits of the original account have been minimized to preserve the local flavor of the stories. Some translation error may have occurred in converting the handwritten document to an electronic format. If anyone has further information about Wedemeyer or his account of these fisheries, we would like to hear from you. The first story is about uhu (parrotfish) fishing.

Uhu Fishing

Well, it's time for go home now, so I took baby in my arms and went home on the trail. All were home waiting for us, they had plenty of wawa and squid. Namau had made a square net with a big mesh sometime ago. Four guava sticks spliced in the middle, lashed with fish line—a span of about 7 ft. from corner to corner. About a 2 lb. stone was tied underneath the center of the sticks to sink the net.

He said, we take the Opena ke, set net, and try to get our live Uhu this evening. If we catch one, we fish for Uhu tomorrow. Around 5 o'clock in the afternoon we all went to coconut island to set our net. We jumped in the water and started pounding with clubs and rocks to chase the fish in the net. We got some fish, Kumu, Kola, & Palani, so we went to another spot and caught our red Uhu and a variety of other fish. We put the Uhu in a little box with plenty of holes in it to keep it alive and then went home. The ladies got busy cleaning the fish and salted it to be dried. Early the next morning, we put the Uhu net on canoe, paddled over to the Coffee shop and had coffee, then pulled to Coconut Island on the outer part. The sea was calm and the water clear. We could see the bottom clear, but if the land breeze would freshen up, we would use our Coconut or Kukui nut to smooth it down. Now I was paddling the canoe, when Namau said stop he had seen one Uhu on the bottom in about 4 fathoms of water. He got the net ready, took Uhu out of the box, got out a big needle which they use on heavy canvas or sewing up sugar bags and heavy twine. He put needle and twine through the fleshy part of lower jaw of the Uhu, tied him in bottom of net with a flat round stone, then lowered net with a fishing line attached to net. Then you saw the fun, this was his domain, his home, his hunting ground no trespassing allowed here, no outsiders. He'd go for the Uhu in the net, his teeth are one solid bridge, upper & lower jaw that is why he is never caught on a hook, to my knowledge. Like a game cock in a pit, he rushes for the Uhu in the net to his doom and death. Up comes the net with 2 Uhu inside, he was an 8 pounder. The hook did not get him—a smart fish. But not smart enough for the old time Hawaiian, we got him without the hook or spear. Now for the next one, and the one after, until we had about 15 red and blue ones. The Uhu comes in 2 colors, red and blue. They weigh all from 5 to 15 pounds. The price was 50 cents each, small one or big one. A good eating fish cooked or eaten raw with Limu.

Sometimes Mr. Uhu is smart, he goes all around the net but won't go in. Then we take the Uhu out of the net, tie him on a line, pull him up and down a few times. The Uhu on the bottom gets mad, he rushes in for a fight. Up and down we pull our Uhu, let him hit him a couple of times, now he be ready for the kill. We put our net down, lower our Uhu in the net, the other Uhu goes right after his enemy in the net he goes. Yes, Mr. Uhu is smart, but not too smart for the old time Hawaiians. So friends I have told you about Uhu fishing a lost art not known to the new generation of fishermen today. Uhu were plentiful all over the reef where you see the Breakwater today and at Papaikou.

Shark Follow Fishermen

It so happened that some party had offered us a dollar a piece for large Uhu, so my father-in-law said we go to Papaikou and get the big ones. We went and spotted a big blue one, just as he got over the net out of nowhere a big shark got him. Our net came up fast so we still had our Uhu, we watched Mr. Shark cruising back & forth on the bottom looking for another Uhu. So I told my father-in-law we go another place, but he said no use, Mr. Shark seen the shadow of our canoe and will follow us when we go. A light breeze had come up from the north so we put up sail, went home and cooked and ate our Uhu. We quit Uhu fishing for awhile.

CNMI Economic Decline Renews Interest in Traditional Fishing

According to a US General Accounting Office report released on July 14, 2011, the CNMI's economy is suffering an ongoing recession due to the departure of the garment industry and decline in its tourism industry. The garment industry was central to the CNMI's economy, and in early 2009 the last garment factory was closed. The tourism industry has also declined as visitor arrivals have decreased by 49%, from a peak of about 727,000 in 1997 to roughly 388,000 in 2010. Revenues available for appropriations have fallen by 45%, from $240 million in fiscal year 2005 to an estimated $130 million for fiscal year 2011. Since 2007, labor costs have also increased following the application of the federal minimum wage. While the CNMI economy continues to decline, along with reports of another imminent government shut down, and the yet-to-be published federal guidelines on federal takeover of immigration, both government and business leaders are exploring other options to make ends meet.

The gigao (traditional fish weir) separates fish by size through the use of botsa (pockets). One reason for the botsa is to keep stingrays out of the pocket that fishermen enter to harvest the fish. Source: www.pacificworlds.com/cnmi/sea/reef.cfm

During a recent workshop on coastal and marine spatial planning held in Hawaii, the Mayor of Saipan, Hon. Donald Flores, and the Mayor of Tinian, Hon. Ray Dela Cruz, both expressed interest in meeting with the CNMI Department of Lands and Natural Resources to discuss the possibility of allowing the use of traditional fishing practices for subsistence fishing. One such practice that is no longer being used but has been practiced in the past is gigao, a Chamorro stationary fishing trap with extended arms to guide fish into the trap. The trap is usually placed at a strategic location where the fish travel within the lagoon. The fish enters through the four doors designed to keep the fish inside. The trap is checked daily to take the fish. Small fish or other fish not appropriate for harvesting are released, which makes this fishing technique an effective conservation effort. This practice is similar in concept to the bigger and more elaborate open ocean cage farming practices in other parts of the world, except that the trap usually extends above the water with wooden poles and mesh wires.

CNMI Fish Market, Exports on Upswing

The Northern Marianas fish market will be located at the US Island Seafood facility in Garapan.

The Northern Marianas Fishermen's Marketing Association (NMFMA), which was incorporated on April 12, 2011, has secured a contract agreement with the USA Island Seafood Inc. for the lease of a commercial space of more than 1,000 square feet within its facility along Beach Road in Garapan, Saipan. The association will use the space for a fish market, which will include an office, storage, main store area, processing room and a walk-in chiller and freezer.

Having secured a place of its own, the group will soon transfer its equipment from the old fish market, stored at the Division of Procurement and Supply, to the new facility. The equipment includes display cases, chillers, ice makers, refrigerators and chest freezers. All of the equipment will undergo extensive inspection and assessment to determine their working condition and immediate repair if needed.

NMFMA has developed a comprehensive business plan and is also developing a grant proposal to secure funding assistance under the Marine Conservation Plan (MCP) for the Commonwealth of the Northern Mariana Islands (CNMI). The funds would help finance the construction of the market's office and storage walls, elevated flooring in the processing room and walk-in chiller and freezer units. It would also provide start-up costs for the operation of the market.

Blue Marlin I *owner Ambrose Ogumoro (right) and crew display pelagic and bottomfish species caught in Northern Islands following another successful fishing trip.*

The association briefed members of the 17th CNMI Legislature who offered to pass a resolution supporting the new fish market.

According to Richard Seman, NMFMA president, one reason for establishing a fish market cooperative is to ensure consistency and reliability to satisfy local and export clients. He said the recent export of bottomfish to Hawaii demonstrates CNMI's ability to ship and deliver top quality seafood products.

Seman was referring to the *Blue Marlin I*, a Saipan based bottomfish vessel with a permit to fish bottomfish species, which made a test run to market its fish in Hawaii on Aug. 16, 2011. The fish were processed and packaged at the US Island Seafood Inc. before being shipped on Delta Airlines to Hawaii via Japan. The 500 pounds of fish caught from the Northern Islands included deepwater snappers favored by Hawaii consumers. The quality of the fish was well received by United Fishing Agency (Honolulu fish auction).

CNMI Turtle Tagging Update

The Commonwealth of the Northern Mariana Islands (CNMI) Turtle Program successfully deployed satellite tags on three green sea turtles this year, marking the first ever satellite tagging in the CNMI. The turtles were tagged

after nesting on three beaches on Saipan. The first turtle was tagged on May 25 at Bird Island Marine Sanctuary. The turtle, named Kumiko in memory of a volunteer who passed away on the same evening the turtle emerged to nest, measured 88.7 cm in straight carapace length (SCL). After being tagged, the turtle headed west and is now in Tagun Bay, Philippines. The second turtle, measuring 93.6 cm SCL and named Magas, a Chamorro word for boss, was tagged at Lao Lao Bay Beach on May 31. Unlike Kumiko, Magas moved from the island toward Japan. The third turtle tagged was

Magas with Jessy Hapdai (holding flashlight) and Joe Ruak at Lao Lao Bay. T. Summers photo

named Limwamway, which means beautiful in Refaluwasch. Measuring 97.3 cm SCL, Limwamway was tagged at Paupau Beach on June 15. Limwamway stayed much longer around the island, nesting nine times, before moving toward Japan.

According to Tammy Summers, NOAA contractor and team leader for the local program, sea turtles that nest in the CNMI stay long enough to mate and lay several nests and then are off to foraging grounds. There the turtles find food and shelter for several years until they return to their nesting grounds on Saipan beaches.

Satellite tagging is an advanced technique currently being deployed for tracking turtles. It provides scientists information in real time on turtle movements, dive time, water temperature and more.

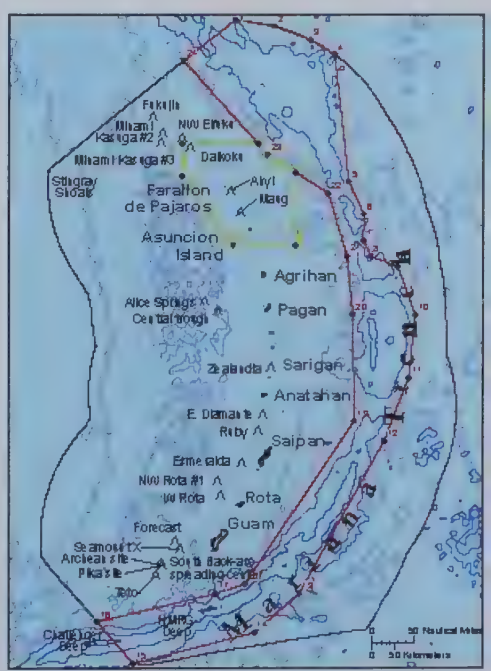
The CNMI Sea Turtle Program is under the Department of Lands and Natural Resources. Besides Tammy, program personnel include Joe Ruak and Jessy Hapdai, who are a department employee and contractor, respectively.

Feds Fail to Consult with Local Marianas Monument Advisors

When President George Bush designated the Marianas Trench Marine National Monument on Jan. 6, 2009, one of the provisions in the proclamation called for the establishment of the Mariana Monument Advisory Council (MMAC). The MMAC's job is to provide advice and recommendations on the development of management plans and management of the monument. The Advisory Council consists of three government officials of the Commonwealth of the Northern Mariana Islands (CNMI) and one representative each from the Department of Defense and the US Coast Guard. The members from the CNMI are Ben Sablan, John Joyner and Sylvan Igisomar, former Division of Fish and Wildlife (DFW) director. In August 2011, Gov. Benigno Fitial requested that Arnold Palacios, new DFW director, replace Igisomar on the MMAC. The governor has not received a reply from the federal government.

In June 2011, Sablan and Joyner participated as guest speakers on a radio talk show on KKMP Radio to discuss updates on the MMAC and the monument. During the discussions they pointed out that the federal government has not taken action in forming the MMAC despite the proclamation requiring its formation within three months from the date the proclamation was signed. The MMAC has not had any meetings. Sablan and Joyner were aware of a September 2011 meeting in Kona, Hawaii, on the Mariana Trench Marine National Monument science and research, but they weren't provided an agenda or documentation to review in preparation for the meeting. They were aware of a solicitation for public comments regarding the monument, which appeared in the local papers. They were concerned that the federal government is moving ahead on the monument activities without getting the MMAC involved. Joyner and Sablan said any scoping meetings to be held about the monument should take place not in Hawaii but on the islands of Rota, Tinian and Saipan in the CNMI where the people affected by the monument are located.

At the 150th Western Pacific Regional Fishery Management Council meeting, Sablan (who was then a Council member) also raised questions about the proposal to create a wildlife refuge in two of the units of the Monument in the CNMI and how the designation would impact the commercial fishing aspect of the monuments. He was referring to an Order issued by Secretary of the Interior Dirk Kempthorn, dated Jan. 16, 2009, barely 10 days after the proclamation was signed, which gave the US Fish and Wildlife Service authority to manage the "Trench Unit" and the "Volcanic Unit" as units of the National Wildlife Refuge System. According to Sablan, the change of designation was made without consultation with the CNMI MMAC members. He also said that their appointments were made in September 2010 but they have not been provided any opportunity to work on MMAC activities.



Yellow square is "Islands Unit," red area is "Trench Unit" and the ^s are the "Volcanic Unit" of the Marianas Trench Marine National Monument.

Traditional Fishing Video Premiered on Guam

Traditional Fishing on Guam: Chamoru Chenchulu Fishermen premiered on Aug. 13, 2011, at the Guam Fishermen's Cooperative Association, where it was well received by more than 200 viewers. The video was also featured at the Natural History and Cultural Heritage Conference hosted by the Guam Museum and Department of Chamorro Affairs on Aug. 30–31. A cross section of the community, including cultural academics and high level members of the tourism industry, attended the event. After welcoming remarks from the Governor and the Speaker of the Legislature, Joseph Cameron, president of the Department of Chamorro Affairs, said the video is a reminder of the importance of culture and the perpetuation of those activities that safeguard culture.

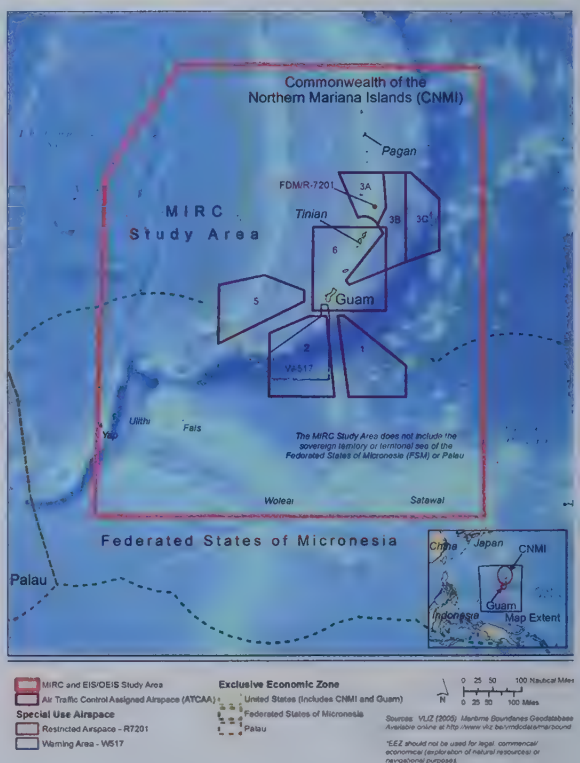
Bobby Alvarez sewing together two sides of the chenchulu.

Chenchulu is a surround net used to corral a variety of fish, such as atulai (big-eye scad, *Selar crumenophthalmus*) and sesjun (adult rabbitfish, *Siganus spinus* and *Siganus argenteus*). The net can be set from a boat or from the shore. If it is set from the shore, it is carried into the water on two inner tubes with plywood attached to the bottom to make the inner tubes into floating pans. Once the fish are corralled into the net, they are harvested with a scoop net or by spear.

The video was produced by Judy Amesbury of the Micronesian Archaeological Research Services (MARS) and features local fishermen Ray Topasna, John Raymond Aguon and Bobby Alvarez and narrator Leonard Iriarte. It was funded through grants from the NOAA Marine Education and Training program, Guam Humanities Council, Western Pacific Regional Fishery Management Council and Guam Preservation Trust. PBS Guam provided production services. A booklet on traditional fishing will also be produced as part of this project.

Increased Military Activity Impacts Mariana Fishing Communities

Local fishermen are beginning to feel the impacts of increased military activity on Guam and the Commonwealth of the Northern Mariana Islands (CNMI). Military operations within seven airspace zones and two sea level zones, collectively known as the Mariana Islands Range Complex (MIRC), are on the rise. Two of these areas—Farallon de Medinilla (FDM) and Area 517—are important fishing grounds. Military exercises are also occurring outside of MIRC on Guam, where fishermen already can't access the majority of the coastline in part due to military bases as well as rough seas. Additionally, the Navy is proposing the use of active sonar and explosives in a Mariana Islands Training and Testing (MITT) area that engulfs MIRC and the Northern Islands of CNMI and extends westward into international waters.



From the fishermen's perspective, FDM is a fertile fishing ground for mafuti (emperor fish) that is accessible by the small boats that typify the local fleet. FDM is located 54 miles north of Saipan and 150 miles north of Guam.

Per the GlobalSecurity.com website, FDM is an uninhabited 200-acre island, measuring 3 miles by 1/2 mile, which stands about 280 feet above sea level. It is a target range for live bombing exercises and has been used by the military since 1976. It is classified as public land that is under lease by the US military from CNMI until 2075.

Historically, the military restricted fishing around FDM restrictions in waters 0 to 3 nm from shore and on occasional weekends. More recently, the restrictions have been for waters 0 to 10 nm from shore and occur virtually every week. From January to August 2011, FDM waters were closed to fishermen on 98 days to accommodate military exercises. Now the military wants to permanently extend the closed area out to 12 nm.

The Military Integration Management Committee (MIMC) met with Department of Defense representatives in Saipan on Aug. 15 and 16, 2011, to discuss upcoming plans for Guam and the CNMI regarding two proposed actions and a supplemental action. Established in mid-2009, MIMC serves as central organization between the CNMI Government and the Department of Defense, Joint Guam Program Office (JGPO), Marine Forces Pacific (MARFORPAC) and other federal agencies involved with the military buildup in Guam and the CNMI.

The proposed activities include 1) to develop and/or improve existing airfield infrastructure in the US

territories (US Air Force) and 2) to conduct military and training activities within the MITT Study Area (US Pacific Fleet, Navy). Separate environmental impact statements (EIS) and overseas EIS (OEIS) are being prepared for these activities. These two actions are not associated with the Guam Build-up EIS/OEIS or the relocation of US Marine Corps components to Guam. Public scoping meetings for the first proposal are scheduled for Oct. 10-20, 2011. Public scoping meetings for the MITT occurred Sept. 20-28, 2011. For more on the MITT, go to https://mitt-eis.com/default.aspx.

The supplemental action will be to designate existing air traffic control assigned airspace covered under the MIRC EIS/OEIS to Warning Areas, to extend the restricted airspace at FDM from 3 nm to 12 nm, and to extend the surface danger zone at FDM from 10 nm to 12 nm to coincide with the restricted airspace. The timeline for this action has not been announced.

While CNMI fishermen feel the squeeze at FDM, fishermen on Guam are concerned about their prime fishing grounds around Santa Rosa Reef and Galvez Bank. These grounds are located in MIRC Area 517, also known as W-517, a 14,000 nm^2 polygon that begins south of Guam and extends south-southwest in international waters. W-517 supports surface and aerial gunnery, missiles and laser exercises.

During the months of May to August 2011, the military conducted exercises 19 days in Area 517, a 380% increase over the previous four months, which had only five days of military activity. Additionally, there were 10 days of military exercises at the Tipalao, Cetti and Agat Bays on the southwestern side of Guam during the same period. These bays are not on the regular list of areas for military exercises under MIRC.

On June 27, 2011, the Western Pacific Regional Fishery Management Council expressed concern to the Navy about the need for improved communication and coordination between the military and fishing communities in Guam and CNMI. Deputy Assistant Secretary of the Navy Donald Schregardus responded that he has asked the commander of the Joint Region Marianas to work with the Council and the fishermen on fishing access and related concerns.

Cuvier's Beaked Whales Strandings in CNMI

Two Cuvier's beaked whales were found in waters off Saipan, Commonwealth of the Northern Mariana Islands (CNMI), on Aug. 22 and 23, 2011. The first was dead outside the reef, and the second was alive at Micro Beach. CNMI Division of Fish and Wildlife and NOAA biologists decapitated the dead whale and disposed of the body several miles away from the reef. The second whale was euthanized to prevent further suffering and then stored at US Islands Seafood to await biologists from Hawaii to examine it.

David Schofield and Kristy West from Hawaii conducted a necropsy on the second whale, and their initial finding is that the mammal died from intestinal and kidney problems. They also found an inch of plastic bag in the whale. It will take up to six months to a year to complete their investigation from samples taken from the whale to determine the exact cause of mortality.

According to the National Marine Fisheries Service (NMFS) Aug. 3, 2010, final rule on marine mammals within the Mariana Islands Range Complex (see article on Mariana Military Activities in this issue), the Cuvier's beaked whale is found regularly year-round in waters surrounding the CNMI and Guam.

Mariana Summer Derby & Tournament Results

Capt. Rick George (right) of F/V Luka & Ben *and anglers Steven Igisair, Phil Aldan Jr., Ben Fitipol, Phil Aldan, and Mike Okubo with their winning 420-lb Pacific blue marlin at the 27th Annual Saipan International Fishing Tournament.*

The Commonwealth of the Northern Mariana Islands (CNMI) and Guam hosted a series of fishing derbies and tournaments during the summer.

The *27th Annual Saipan International Fishing Tournament* took place July 23 and 24, 2011. Capt. Rick George and crew reeled in the winning 420-pound Pacific blue marlin, beating 49 other boats from Guam and the CNMI. They hauled in their winning prize before noon on the first day, which has never been done throughout the event's 27 years.

Sixteen teams of two (including three teams from Saipan) entered the *2011 Marianas Spearfishing Challenge*, which was the largest number of entries since the inception of the challenge in 2005. Held 6 a.m. to 3 p.m. on Aug. 13 and sponsored by the Marianas Underwater Fishing Federation (MUFF), this free-dive event was a one down–one up event to ensure the safety of the divers.

Boats were allowed to launch from Hagatña and Agat Marinas, Ylig Bay, Apra Harbor or Merizo Pier. Participants were allowed to dive anywhere except for marine preserves, inner Apra Harbor (must not pass inside of green buoy–Orote side and inner edge of breakwater at mouth of harbor) and restricted areas.

Dive teams could win in one category only to disallow the scooping of prizes and provide for more winners in the event. This year's event featured the Open Fish category, which was the combined weight of the largest two fish from each team. No sharks, rays, eels, balloonfish, triggerfish, batfish, angelfish, filefish, barracuda, twin spot snapper (tagafi) or one spot snapper were accepted at the weigh in. Other categories included lagua (parrotfish), tataga (unicorn fish), guili (rudder fish), hangon (orangespine unicorn fish) and gumson (octopus).

Ronald Laguana II and his partner Michael Tripp were the big winners of the day with a combined two-fish total of 22.2 pounds. Last year, Laguana came in third at the Sixth Annual La Paz World Cup Invitational

Ron Laguana II and Michael Tripp took 1st place in the Open Category at MUFF Spearfish Challenge. Ed San Nicolas photo

Spearfishing Championship, which was held July 11-15 in Palapas Ventana, Baja, Mexico.

The Guam Organization of Saltwater Anglers (GOSA) held their *2nd Annual Mafute/Lililok Inshore Challenge* from 6 p.m. Aug. 12 to 2 p.m. Aug. 13, 2011. The overnight tournament provided an additional challenge with participants getting more points for bringing in their fish alive. Of the 23 participants, Kyle Hiura won first place with a 10.13-pound lililok (adult yellow lip emperor). The event utilized FishBox.org to record the tournament.

Kyle Hiura grabbed 1st place at the GOSA Challenge with his winning 10.13-lb lililok (yellow lip emperor).

The 16th Annual Guam Marianas International Fishing Derby sponsored by the Guam Fishermen's Cooperative Association was held Aug. 20 and 21, 2011, following a period of inclement weather that hampered local fishing efforts. A brief lull in the weather provided an opportunity for this yearly event to proceed without incident. Seventy-nine boats participated in this year's derby, which was a slight increase over last year's event, despite concerns of low participation due to the high price of fuel ($4.62/gallon) and the number of boats out of commission due to repairs. However, these concerns dissipated as boats, including two from Saipan and one from Rota, checked in at the start of the derby.

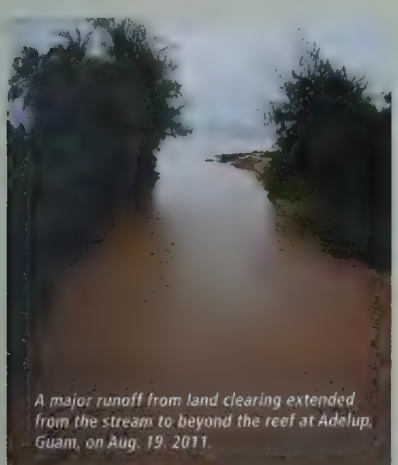
While many fishermen reported signs of fish at many sites, few were actually biting and it was a challenge for the small boat fleet to catch fish. This did not stop seasoned fishermen from catching some notable fish. The 14-foot *Rock Island* brought in the winning 357.5-pound Pacific blue marlin. Toward the end of the second day, *Emmanuel* brought in a 99.75-pound yellowfin tuna to win that category. The awards banquet on Aug. 23 honored the winners and celebrated the last event of a month full of fishery related events.

The 14 foot Rock Island *took 1st place with its 357.5-lb marlin at the 16th Annual Guam Marianas International Fishing Derby.*

Interactive Exhibit Raises Eco Threat Awareness

A young learner points to mahongang (spiny lobster) at the Council's exhibit during the Gupot Y Peskadot (Fishermen's Festival).

The Western Pacific Regional Fishery Management Council's island coordinator on Guam, John Calvo, has developed an interactive exhibit to raise local awareness about the negative impacts of poor land use decisions on the marine ecosystem and to provoke public discussion on how to mitigate them. The exhibit is illustrated with graphic photos and has participants locate the threats and impacts on a map of Guam. One of the pictures shows a muddy plume by the Governor's office in Adelup, which went far beyond the reef line. The Governor's chief of staff, Frank Arriola, said an investigation revealed the source to be the clearing of land.



A major runoff from land clearing extended from the stream to beyond the reef at Adelup, Guam, on Aug. 19, 2011.

Entitled "Protect Guam's Natural History and Cultural Heritage through Responsible Economic Development," the exhibit has been well received at fishing and community events. Many agree that it is important to remind developers and policymakers about their responsibility to protect the island.

New Fish Market Opens in American Samoa

The Department of Marine and Wildlife Resources (DMWR) opened a new fish market in Fagatogo, opposite the DMWR office building, on July 18, 2011. Local fishermen pay $3.00/day for the use of the facility. Catches are placed inside eight available cement bins and then covered with ice.

No fish were sold the first two days, but on the third day, bottomfish, tuna, mahimahi, various reef fish and lobsters were sold by three fishermen. On the fourth day, tuna, reef fish and bottomfish were sold. Yellowfin tuna reaped in about $8/pound and red snappers about $12/pound.

DMWR has been providing fishermen with ice and is encouraging fishermen selling at roadsides to utilize the new, clean and air-conditioned market. The centralized location also helps DMWR to sample fish.

Customers enter the new fish market in Fagatogo through the double door. The white background on the corner windows is the walk-in freezer.

The number of customers has gradually increased. The supply, however, hasn't kept up with the demand especially on Saturdays when local residents seek fresh fish for their Sunday *to'ana'i*.

Local fishermen are hoping that, in the future, they will be able to sell their catches to a middleman at this new fish market and immediately get their money so they can return home to rest and prepare for the next fishing trip. They have also asked that the fish market be opened for a couple of hours on Sunday morning. Council staff has expressed interest in assisting local fishermen setup a fishermen's cooperative to run the facility.

NZ Wins I'a Lapo'a Tournament

About a dozen boats from American Samoa, Samoa and New Zealand participated in the 12th International Pago Pago Gamefishing Association Fishing Tournament, held May 9–14, 2011. Girlfriend from New Zealand reeled in a 258-pound blue marlin plus six others that were tagged and released, a sailfish and a wahoo to win the tournament and an invitation to next year's IGFA Offshore World Championships in Cabo San Lucas, Mexico. The largest yellowfin and wahoo caught, weighing 154.2 and 41.2 pounds respectively, were both boated by *Fu'a II*. A few masimasi (mahimahi) were landed, including a 35.2-pounder hauled in by Reel Cat.

The main tournaments sponsors were Steinlager, Pago Pago Game Fishing Association and the American Samoa Visitors Bureau. Several other local businesses also provided associate sponsorships. For more information on the tournament, go to http://ppgfa.com.

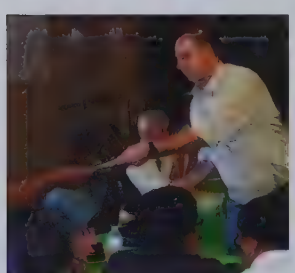
12-year-old Ryan Simpson with the 1st place, 154-lb yellowfin that he landed on Fu'a II, skippered by his dad, Vaughan Simpson.

John Kaneko conducted the workshop to train local fisherman proper fish handling techniques.

American Samoa Fishermen Trained in Fish Handling

In October 2010, Tri Marine LLC announced the formation of a partnership with Hong Kong-based Luen Thai Fishing Ventures and Taiwan-based Yuh Yow Fisher Co. Ltd. to conduct fresh fish export out of American Samoa. Tri Marine is a leading global tuna supply company that has the lease for the Pago Pago tuna cannery previously occupied by Chicken of the Sea. The new tri-party venture, Samoa Tuna Processors, will be the first large scale attempt to export high-quality, fresh tuna from American Samoa to US and Asia seafood markets.

Samoa Tuna Processors has expressed interest in having local American Samoa vessels supply fresh whole fish for its venture. The local longline fleet, which was once dominated by small double-hulled aluminum vessels called alia, has now been replaced by larger conventional monohull vessels. Historically, both fleets supplied frozen albacore to the local Pago Pago canneries.



Craig Double, Samoa Tuna Processors facilities manager, assists at the American Samoa fish handling workshop.

Recognizing this new opportunity for the existing operating vessels as well as the potential to revitalize the local alia fleet, the Western Pacific Regional Fishery Management Council, at its March 2011 meeting in American Samoa, recommended that a fresh fish handling workshop be conducted in the territory to train fishermen how to supply quality fresh fish that will be safe to eat and achieve a fair market price.

In coordination with Samoa Tuna Processors, the Council secured John Kaneko, doctor of veterinary medicine, to conduct the workshop. It was held May 21, 2011, at the Samoa Tuna Processors facility and attended by approximately 40 people including longline vessels owners, captains, crew, alia fishermen, members of the public and journalists from the local television station and newspaper.

Kaneko presented information on fresh fish markets that pay high prices for fresh quality product. Fishermen learned how histamine accumulates in fish as temperature increases and techniques to address this issue, such as gilling, gutting and packing the fish on ice to maintain its temperature below 40 degrees F as long as possible. The training was well received, but the participants' primary concern was how to equip or modify their existing vessels to carry ice onboard.

While Samoa Tuna Processors has yet to receive fresh fish from any local vessel, they are working with a few local operators to be the first to provide them fresh, high quality tuna. It is believed that the tuna resources exist in the offshore waters around American Samoa, and, if Samoa Tuna Processors pays a competitive price, it won't be long before the territory begins exporting fresh fish caught by locally owned fishing vessels.

American Samoa Longline Gear Final Rule

A final rule for Amendment 5 to the Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region was published Aug. 24, 2011, in the Federal Register. It establishes gear configuration requirements for the US pelagic longline fishery based in American Samoa. The action is intended to reduce interactions between the fishery and Pacific green sea turtles. The requirements under this rule include branch line lengths, minimum float line, number of hooks between floats and distance between floats and adjacent hooks. This rule limits the number of swordfish taken and ensures that longline hooks are set at depths of at least 100 meters to reduce interactions with green sea turtles. For details, see the final rule at www.gpo.gov/fdsys/pkg/FR-2011-08-24/pdf/2011-21655.pdf.

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Toloumu Receives Marine Science Fellowship

In 2010, the Western Pacific Regional Fishery Management Council partnered with the American Samoa Coral Reef Advisory Group (CRAG) and the University of Hawaii at Hilo (UHH) to develop the Marine Science Undergraduate Fellowship Program. The program provides financial support for an American Samoa undergraduate student to obtain a UHH marine science degree. UHH serves as the financial administrator of the project, and Adjunct Professor of Marine Science Michael Crosby, PhD, serves as the principal investigator.

As part of this agreement, CRAG is to provide the fellowship recipient with an internship position in the American Samoa Department of Marine and Wildlife Resources or other marine science focused program in American Samoa during the UHH's summer breaks. The internship duties will be linked to the goals of CRAG, the Council and UHH marine science faculty research projects.

The first recipient of this fellowship is Derek Toloumu. He has been working hard with his mentor, Dr. Lisa Parr, to complete the necessary coursework to achieve the bachelor's degree. He is currently in his second year of the fellowship and received good marks the first year.

Fellowship recipient Derek Toloumu (left, standing) provides outreach at a school event in American Samoa

Commercial Fisheries Biosampling Program Underway

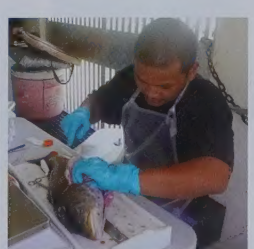
Sustainable fisheries management requires an understanding of stock and fishery-specific differences in age and growth; size-and-age structured harvest; and life history data (such as size/age at maturity, size-specific sex changes, size/age at which fish are first caught, seasonal and size-specific changes in spawning, fecundity, and sex ratios). To help provide the data, the National Marine Fisheries Service (NMFS) has initiated the Pacific Islands Commercial Fisheries Biosampling (CFBS) program. Local CFBS staff in each of the US Pacific Island territories and commonwealth will provide long-term monitoring of the fisheries to get the data needed to manage fisheries as required under the Magnuson-Stevens Fishery Conservation and Management Act.

The CFBS staff members are collecting whole fish (voucher specimens) for species identification and documentation, taking fin clips (for DNA "Barcode of Life"), collecting otoliths (earbones) and staging gonads from the widest possible size range, starting with selected species. The fieldwork is well underway, and local staff members are developing their skills in conducting basic laboratory processing (removing otoliths and doing preliminary gonad "staging"). Now that the program is able to get sufficient samples and identify key commercial species in each region, in depth laboratory work ("reading" otoliths, determining DNA profiles and conducting detailed studies of reproductive size and fecundity) will be scaled up over the next few years.

The table below shows the status, as of Aug. 15, 2011, of CFBS data collection by island area where the fish were landed. Sample sizes are increasing daily and a more comprehensive status report is in progress.

Summary of Commercial Fisheries Biosampling: Status mid-August 2011

Territory (where fish landed)	Months	Species	Fishermen Trips	Life History Samples	Field Collections		Laboratory Work	
					Lengths	Weights	Gonads	Otoliths
CNMI	Dec. 2010–present	114	304	*	20,502	20,582	* Some collections are still pending data entry. Initial focus on fieldwork.	
GUAM	Aug. 2009–present	188	303	144	27,665	27,903	551	552
AMERICAN SAMOA	Oct. 2010–present	81	45	6	4,049	3,889	179	222
TOTALS		≈ 220	652	*	52,216	52,374	*730	*774



Left: Biosampling staff in American Samoa, Saolotoga Tofaeono, extracting otolith (fish ear bone) and gonad of reef fish. Above: This 253-lb gadao (giant grouper, Epinephelus lanceolatus*), pictured with a staff member from the Guam Fishermen's Cooperative Association, is the biggest fish to date to be sampled in Guam. It was caught in 25 feet of water off the northwestern coast of Guam and had 15 lbs of spiny lobsters in its stomach. Above right: Eric Cruz, Guam biosampler based at the Guam Fishermen's Cooperative Association, removing life history samples from a yellow lip emperor* (Lethrinus xanthochilus).

Indigenous Leaders Meet on Climate Change

The indigenous offices of the four US Pacific island areas met with the Council to examine how indigenous cultural resources can be used to address climate change and what is needed to make this happen.

At the first meeting of its kind, representatives from all of the official indigenous offices in the US Pacific Islands met with the Western Pacific Regional Fishery Management Council in Honolulu to discuss climate change. At the Sept. 8 and 9, 2011, meeting were Paramount Chief Tufele Lia, Office of Samoan Affairs; Joseph Cameron, Guam Chamorro Affairs; Ignacio "Ike" Demapan, Commonwealth of the Northern Mariana Islands (CNMI) Indigenous Affairs; Angie Igineoef, CNMI Carolinian Affairs Office; and Jeff Kent, Office of Hawaiian Affairs. Also represented were the American Samoa Department of Marine and Wildlife Resources, University of Guam Marine Laboratory, CNMI Department of Lands and Natural Resources, the Aha Moku Council and NOAA Fisheries/ Coastal America and Pacific Islands Regional Office.

Guest speaker Micah McCarty, tribal leader of the Makah Tribe, introduced an initiative by the West Coast tribes to bring the issue of climate change impacts on indigenous communities to the national level. The US Pacific Islanders agreed with McCarty that indigenous communities hold generational knowledge and skills that have enabled their cultures to adapt and survive environmental threats and that with proper support these traditional practices could help indigenous and non-indigenous peoples, alike, to face climate change today.

The participants shared the impacts of climate change and extreme weather on their communities and environment, ongoing mitigation efforts, and relevant traditional knowledge and practices. Coastal erosion from tsunamis and tidal waves, unusual seasons for some flora and fauna, and low to no productivity for some species were among the observations noted by the various island areas.

The participants agreed to continue to work with the Makah Tribe and other Native Americans and Alaskan Natives on the First Stewards Climate Change initiative. A short video, student art and essay contests, exhibits, and national and regional events are some of the activities that the US Pacific Island participants will undertake over the next year to bring the needs and assets of native peoples into the climate change discussion.

New Resources Available

Island Ecosystem Game

In 2002, the Western Pacific Regional Fishery Management Council in partnership with the Hawaii Department of Education and the Pacific Resources for Education and Learning produced the FishQuest television series with accompanying lesson plans. One of the favorite lessons taught students the different ecosystems for tropical island fish, such as coral reef, bottomfish and pelagic, as well as some of the important species that live in them.

Nearly a decade later, the content is still important but capturing students' attention is more challenging. To keep up with the times, the Council has converted the lesson to an interactive computer game. Fish names are provided in English, Hawaiian, Samoan, Chamorro and Refaluwasch. National science standards and ocean literacy concepts are provided to facilitate use in the classroom. Funding support was provided by the NOAA Coral Reef Conservation Program.

Showcased at various fishing and community events, the game has proven to be a success and is now available on the web at www.wpcouncil.org/education.

Fish Forever Video Podcasts

The Western Pacific Regional Fishery Management Council, with funding support from the NOAA Coral Reef Conservation Program, has completed a series of 10 video-podcasts for fishermen and middle school students. Each segment runs five minutes for fishermen and three minutes for students and focuses on a different fishery-related subject. The aim of the series is to promote fishery conservation and management so the US Pacific islands can enjoy local fish forever.

Each month a different podcast will be released via email and then posted on the Council website. To have the featured video podcast sent to you each month, send your email address to info.wpcouncil@noaa.gov. Please also indicate whether you'd like to receive future newsletters and correspondences by email instead of by postal mail. For more information, contact Sylvia Spalding, the Council's communication officer, at sylvia.spalding@noaa.gov.

Council Family Update

Richard Seman

F. McGrew Rice

The Commerce Department on June 2, 2011, announced the appointment of the new and returning members to the regional fishery management councils. For the Western Pacific Council, the appointees were **Richard Seman** for the obligatory seat for the Commonwealth of the Northern Mariana Islands (CNMI) and **F. McGrew Rice** and returning member **David Itano** for the two at-large seats.

Seman is the publisher/editor of *Marianas Fishing Magazine* and an aquatic education and outreach specialist. His past employment includes secretary of the CNMI Department of Lands and Natural Resources and director of the CNMI Division of Agriculture. He has been involved with the Council since 1990, as a Council member, Plan Team member and Advisory Panel member.

Rice is a second generation charter fisherman and has been fishing since he was a young child. He is very knowledgeable about the waters off the Kona coast of the Big Island, Hawaii, and is always tournament ready. He has a few "granders" and world records under his belt and is always ready for another chance at one with a lucky angler in the chair.

Another new member to the Council is **Arnold Palacios**, director of the CNMI Division of Fish and Wildlife. He joined the Council at its June 2011 meeting, replacing Ignacio Dela Cruz as the CNMI designated state official. Palacios is a former member and speaker of the CNMI House of Representatives.

Baked Monchong

with Crab Stuffing and Sauteéd Vegetables

By Chef Nico Chaize
Nico's at Pier 38, Honolulu

Serves 2

Ingredients:

7 oz	Monchong (pomfret) fillet
2 oz	Crab meat
1	Onion
2 stalks	Celery
2	Garlic cloves
2 Tbsp	Heavy cream
3 Tbsp	Bread crumbs
Pinch	Salt
Pinch	Pepper
Pinch	Paprika
2 Tbsp	Butter
1	Lemon, juiced
1	Zucchini
1	Carrots, shredded

Cook the crab meat with half onion, the celery and the garlic. Finish with heavy cream and bread crumbs. Let the crab mix cool down.

Cut a pouch into the monchong fillet and stuff it with crab mix. Add salt, pepper and paprika, and sauteé until brown. Then bake for 18 minutes at 350° F.

Serve with butter and lemon juice (optional). Garnish with sauteéd zucchini, carrots, the other onion half, and garlic.

Lunar Calendar Art Contests Now Ongoing

The annual art contests are now open for the traditional lunar calendars produced by the Western Pacific Regional Fishery Management Council in partnership with local lunar calendar committees and organizations. The theme this year will be based on traditional knowledge as it relates to climate change. For more details on the contest for your island area, contact the Council at info.wpcouncil@noaa.gov.

Fish Is Brain Food!

A new documentary on mercury in fish made for Prairie Public Broadcasting Station (PBS) has just been made public. You can watch it at www.undeerc.org/fish. The website also includes short video clips, brochures and fact sheets that showcase the health benefits of seafood consumption for pregnant women, babies, your heart and your brain. The University of North Dakota produced the video, with footage from Hawaii fishery and Honolulu Fish Auction. The documentary will be made available to PBS stations across the country.

Monchong is the name used in Hawaii for two species of deep sea pomfret. These are harvested in small quantities by the tuna longline and bottomfish handline fisheries. The predominant species is *Taractichthys steindachneri*, known as the sickle pomfret, because of the forked shape of its fins and large scales. The large black scales covering the entire body of this species distinguish it from *Eumegistus illustris*, or lustrous pomfret, which has bronze skin color, larger eyes, and a thicker body. The lustrous pomfret accounts for less than 5% of monchong landings in Hawaii.

For more information on the monchong and other local fish species, visit the Hawaii Seafood Council at www.hawaii-seafood.org.

2011 Council Calendar

October

9
Hawaii Fishing and Seafood Festival, Honolulu

10-20
Scoping Meetings for Divert Activities and Exercises EIS, Guam and CNMI

17-19
108th Scientific and Statistical Committee, Honolulu

18-21
US Coral Reef Task Force, Ft. Lauderdale, Fla.

19-22
152nd Western Pacific Regional Fishery Management Council, Honolulu

24-28
Western and Central Pacific Fisheries Commission Advisory Committee, Honolulu

25-27
Marine Fisheries Advisory Committee, Washington, DC

November

3-5
Papa Kānāwai Kai Puwalu, Honolulu

5-10
The Wildlife Society Conference, Waikoloa, Hawaii

7-9
Pacific Scientific Review Group, Seattle, Wash.

7-13
Asia-Pacific Economic Cooperation, Honolulu

26
Science and Conservation of Hawaiian Odontocetes Workshop, Tampa, Fla.

29-Dec. 1
New Council Member Training, Washington, DC

December

5-9
8th Regular Session of the Western and Central Pacific Fisheries Commission, Koror, Palau

5-9
Society for Conservation Biology, New Zealand

Upcoming Events

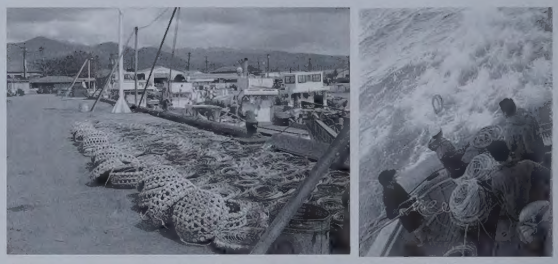
Cultural Tent at the Hawaii Fishing & Seafood Festival

For the second year, the Western Pacific Regional Fishery Management Council will host a cultural tent at the festival, 9 a.m. to 4 p.m. Oct. 9, at Pier 38, Honolulu. This year the tent will feature not only traditional fishing methods but also traditional navigation. Come learn from expert Polynesian and Micronesian navigators at the free, must-see event. For more information, contact Mark Mitsuyasu, Council Program Officer, at mark.mitsuyasu@noaa.gov.

108th Scientific and Statistical Committee (SSC) Meeting

The SSC will meet 8:30 a.m. to 5 p.m. Oct. 17 to 19 at the Council office, 1164 Bishop St., Suite 1400, Honolulu. The major agenda item is acceptable biological catches (ABCs) for US Pacific island coral reef finfish, non-finfish and bottomfish species, including the non-Deep 7 main Hawaiian Islands (MHI) bottomfish. Other major items include non-commercial data collection alternatives for Hawaii, potential American Samoa longline swordfish fishery, essential fish habitat and striped marlin catch limit.

152nd Council Meeting



Fishermen using traditional longline gear toss out rope lines that had been stored coiled in baskets. Pacific Islands Fisheries Science Center photos

The Western Pacific Regional Fishery Management Council will meet at the Laniakea YWCA-Fuller Hall, 1040 Richards St., Honolulu, from 2 to 6 p.m. Oct. 19; 9 a.m. to 6 p.m. on Oct. 20 and 21; and 8:30 a.m. to 1 p.m. on Oct. 22. The Standing Committees will meet 8 to 10 a.m. Oct. 19 at the Council office. The Council will apply the ABCs from the SSC (see above) to specify annual catch limits for US Pacific island coral reef finfish, non-finfish and bottomfish species, including the non-Deep 7 MHI bottomfish. The Council is also scheduled to take action on the other major items considered by the SSC as well as a Community Development Program proposal for a fishing training program requiring a MHI longline exclusion zone exemption to use traditional basket gear.

Public comment periods are provided throughout the agenda. Written comments received prior to Oct. 14, 2011, will be copied and distributed to Council members. After Oct. 14, 2011, the commenter must provide 40 copies at the meeting for the Council members. For more information and complete agendas, visit www.wpcouncil.org or contact the Council at info.wpcouncil@noaa.gov, phone (808) 522-8220 or fax (808) 522-8226.

Fishers Forum: "Code of Conduct for Hawaii Ocean Users"

FISHERS FORUM Hawaii

Fishermen, their families and other community members are invited to join this free, family friendly event at the Waikiki Aquarium, 2777 Kalakaua Ave., Honolulu, from 6 to 9 p.m. on Thursday, Oct. 20, 2011. Through activities, informational booths and discussion, the event aims to foster proper conduct among fishermen and other ocean users. Share your thoughts and learn what others are doing to teach keiki, fishermen and malihini alike to care for our marine environment and respect the rights of others. This event is part of the 152nd Council meeting.

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